

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) The system of classification devised by Linnaeus in the 18th century was: 1) _____
A) based on amassed fossil evidence
B) based on the "kinds" of organisms described in the Genesis creation story
C) cladistic
D) based on knowledge of evolutionary relationships
E) phenetic, based on physical similarities
- 2) Cladistic classifications and phylogenetic classifications: 2) _____
A) consider the unique traits of organisms
B) are both based on evolutionary relationships
C) sort organisms based on their primitive and derived traits
D) differ in their rules about the weight (equal or unequal) given to different traits
E) all of the above
- 3) Compared to primitive traits, derived traits tend to be: 3) _____
A) widely shared among many different species
B) ancient evolutionary developments
C) shared only by distant evolutionary relatives
D) recently evolved characteristics shared by a few closely related species
E) more efficient
- 4) Which list best describes several general characteristics of primates? 4) _____
A) specialized arboreal locomotion, small teeth, monogamous pairs as social groups
B) large litters at each pregnancy; nails have replaced claws most digits; relatively poor sense of smell
C) generalized limbs with grasping digits; enlarged brains; keen vision
D) presence of a tail; long period of immaturity; brain at same level of complexity as nonprimate mammals;
E) relatively poor vision; generalized limbs with non-prehensile digits; live in social groups
- 5) Campbell and Loy classify modern humans as 5) _____
A) the only species in the family Hominidae and the only species at the "human grade" of development
B) members of the family Hominidae along with Chimpanzees, bonobos, and gorillas
C) as members of the family Pongidae (along with all living apes) and the only species at the "hominoid grade" of development
D) members of the family Panidae and representatives of the "human grade" of development
E) none of the above

- 6) Compared to anthropoids, prosimian primates 6) _____
A) are generally smaller, more often nocturnal, and have a better sense of smell
B) are more often active at night, have better opposability of their thumbs and show no dental specialization
C) evolved much later and show a closer relationship to humans
D) evolved much earlier, are more often diurnal, and have a better sense of vision
E) show considerable dental specialization and are generally carnivorous
- 7) Living tarsiers are difficult to classify as either prosimians or anthropoids because they 7) _____
A) live mainly on the ground
B) lack a rhinarium
C) are insectivores
D) have a rhinarium
E) lack a postorbital bar
- 8) The order Primates can be divided into two suborders called 8) _____
A) Platyrrhini and Catarrhini
B) Hominoidea and Anthropoidea
C) Prosimii and Anthropoidea
D) Haplorhini and Strepsirhini
E) Lemuroidea and Cercopithecoidea
- 9) Anthropoid primates 9) _____
A) lack bony protection for the eyes
B) have a rhinarium
C) have a complex toothcomb
D) have fused halves of the mandible and fused frontal bones of the skull
E) have tactile vibrissae
- 10) Which of the following is a prosimian? 10) _____
A) spider monkey
B) capuchin
C) bonobos
D) lemur
E) baboon
- 11) Which of the following is a New World monkey? 11) _____
A) gibbons
B) guenons
C) mandrills
D) macaques
E) marmosets
- 12) Among the anthropoids, hominoids are characterized by 12) _____
A) having long tails, narrow chests, and complex brains
B) lacking tails and having long backs and 3-cusped molars
C) lacking tails, having reduced canine teeth, and an having unfused mandible
D) lacking tails and having short backs and Y-5 molars
E) having dorsal shoulder blades, broad chests, and a lower brain-to-body ratio than other primates

- 13) The visual-predation theory explains traits as mainly adaptations for 13) _____
A) locating mates and avoiding predators
B) locating and capturing insects in an arboreal habitat
C) arboreal locomotion
D) terrestrial locomotion and hunting insects
E) terrestrial locomotion and hunting small vertebrates
- 14) Bilophodonty 14) _____
A) is characteristic of Old World monkeys
B) is not found in prosimians
C) describes molars with four cusps arranged in front and rear pairs
D) all of the above
E) none of the above
- 15) Compared to monkeys, apes 15) _____
A) depend more on their prehensile tails during arboreal locomotion
B) have evolved more of a "hind-limb dominated" style of locomotion
C) have evolved longer and more freely mobile arms
D) have larger numbers of offspring
E) have never evolved any adaptations for terrestrial locomotion
- 16) Compared to apes, humans show 16) _____
A) a pan-shaped pelvis, a barrel-shaped ribcage, and straight backbone
B) a barrel-shaped ribcage, knees further apart, short pelvic girdle
C) shorter arms, funnel-shaped ribcage, non-prehensile big toes
D) a longer and more narrow pelvis, knees close together, longer legs
E) non-prehensile big toes, head balanced atop backbone, pelvic "bowl"
- 17) Human bipedalism 17) _____
A) is extremely specialized
B) is an efficient and flexible locomotor pattern
C) often results in foot and back ailments
D) is a compromise between upright posture and the birth process
E) all the above
- 18) Which of the following is/are primitive trait(s) of primates? 18) _____
A) power grip
B) postorbital bar
C) heterodont dentition
D) stereoscopic vision
E) all of the above
- 19) The precision grip of apes is 19) _____
A) somewhat impaired by their short thumbs
B) impaired by their long thumbs
C) better than that of humans
D) as good as in humans
E) none of these

- 20) Most of the large size of the human brain is due to an enlargement of the _____
 A) medulla
 B) cerebrum
 C) cerebellum
 D) thalamus
 E) cerebral cortex
- 21) Speech is _____
 A) the oral expression of human language
 B) impossible without symbolic thinking and grammar
 C) dependent on physical structures found only in humans
 D) absent among even the most humanlike apes, chimpanzees and bonobos
 E) all of the above
- 22) Many primate species are threatened with extinction because of human activities. In order to _____
 improve primate's chances of survival, we need to
 A) slow our destruction of the global habitat (especially the tropical forests)
 B) slow the growth of human populations worldwide
 C) reduce our use of primates as food, pets, and research animals
 D) all of the above
 E) B and C only
- 23) Old World monkeys are classified as _____
 A) Primates, Anthroidea, Ceboidea
 B) Primates, Anthroidea, Hominina
 C) Primates, Prosimii, Cercopithecoidea
 D) Primates, Anthroidea, Cercopithecoidea
 E) Primates, Hominoidea, Panidae
- 24) Example(s) of the precision grip include _____
 A) playing the piano
 B) eating with a fork
 C) knitting a sweater
 D) tying a knot
 E) all of these
- 25) Which of the following primates are brachiators or had a brachiating ancestor? _____
 A) howler monkeys
 B) lemurs
 C) mandrills
 D) Japanese monkeys
 E) gibbons

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

- 26) Although Linnaeus did not use evolution as the basis for his classification scheme, many of the _____
 groupings he identified are now understood as the results of phylogenetic relationships.
- 27) Among primates, habitual bipedalism must be viewed as a derived trait of hominids. _____

- 28) All hominids are hominoids, but all hominoids are not hominids. 28) _____
- 29) A fossil primate mandible with unfused halves and a toothcomb is probably from an anthropoid of some sort. 29) _____
- 30) The anatomy of most living hominoids is shaped primarily by adaptations for suspensory locomotion and posture. 30) _____
- 31) Prosimians show that the last piece of bony orbital protection to evolve was the post-orbital bar. 31) _____
- 32) Whether tarsiers should be grouped with the prosimians or the anthropoids is a matter of disagreement among primate taxonomists. 32) _____
- 33) Prosimians show the distinctive primate traits of stereoscopic vision and grasping hands and feet. 33) _____
- 34) Prehensile tails are found in New World monkeys but not Old World monkeys. 34) _____
- 35) Anthropoids, being more intelligent than prosimians, have a better sense of smell than the prosimians. 35) _____
- 36) The term *Homo sapiens* was coined by Carl von Linne 36) _____
- 37) Heterodont dentition is a general trait of mammals 37) _____
- 38) Traditional evolutionary classifications have used cladistic approaches 38) _____
- 39) Today strepsirhines are found only in South America 39) _____
- 40) Over time primates have evolved more highly developed stereoscopic vision 40) _____

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

- 41) The ability to bring the tip of the thumb into contact with the tips of other fingers is known as _____. 41) _____
- 42) Among primates, habitual _____ must be viewed as a derived trait of hominids. 42) _____
- 43) A(n) _____ allows fine control of small objects. 43) _____
- 44) _____ make tools to fish for termites in termite mounds. 44) _____
- 45) _____ refers to the lower molar cusp pattern of Old World monkeys. 45) _____
- 46) _____ is an infraorder of New World monkeys. 46) _____
- 47) A rhinarium characterizes the _____. 47) _____

48) _____ is the family name of the African apes.

48) _____

49) Taxonomy categories usually reflect a(n) _____.

49) _____

50) The _____ is a statement of the numbers and types of teeth found in a particular species.

50) _____

ESSAY. Write your answer in the space provided or on a separate sheet of paper.

51) Discuss the primitive and derived traits of the prosimians.

52) Describe what you feel is the real essence of "humanness." What, if anything, really separates us from the rest of the primates?

53) What is meant by the visual predation hypothesis? What features of primate morphology and behavior does it explain?

54) What is a primate? Of the characteristics you use to define a primate, how do prosimians and anthropoids vary with regard to the traits you used.

55) Are the great apes more closely related to monkeys or humans? Support your argument with anatomical evidence.

Answer Key

Testname: UNTITLED3

- 1) E
- 2) E
- 3) D
- 4) C
- 5) E
- 6) A
- 7) B
- 8) D
- 9) D
- 10) D
- 11) E
- 12) D
- 13) B
- 14) D
- 15) C
- 16) E
- 17) E
- 18) E
- 19) A
- 20) E
- 21) E
- 22) D
- 23) D
- 24) E
- 25) E
- 26) TRUE
- 27) TRUE
- 28) TRUE
- 29) FALSE
- 30) TRUE
- 31) FALSE
- 32) TRUE
- 33) TRUE
- 34) TRUE
- 35) FALSE
- 36) TRUE
- 37) TRUE
- 38) FALSE
- 39) FALSE
- 40) TRUE
- 41) opposability
- 42) bipedalism
- 43) precision grip
- 44) Chimpanzees
- 45) Bilophodonty
- 46) Platyrrhine
- 47) prosimians or lemurs
- 48) Panidae
- 49) common ancestor or evolutionary relationships

Answer Key

Testname: UNTITLED3

50) dental formula

51)

52)

53)

54)

55)